

Examiner's Amendment

1. An Examiner's amendment to the record appears below. Should the changes and/or additions by unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such amendment, it must be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's amendment was given in a telephone interview with John C. Gorecki (Reg. No.38,471) on May 4, 2009.

3. The application has been amended as follows:

Claims 2, 5, 7, 15, 21, 24-26 and 34 have been canceled. Claims 1, 3, 13, 20, 22, 27, 28, 29, 32, 33, 35, 36, 39 and 40 have been replaced with the following amended claims:

Claim 1. (**Currently Amended**) A method of implementing Quality of Service (QoS) across Frame Relay and Ethernet networks to enable similar QoS to be provided to packets in both the Frame Relay and Ethernet networks as the packets pass from one network to the other, the method comprising the steps of:

receiving a packet from the Ethernet network;

identifying the packet according to an Ethernet protocol for servicing;

determining an Ethernet QoS metric for the identified packet, the QoS metric being associated with the packet on the Ethernet network, said determining an Ethernet QoS metric includes considering Ethernet information, wherein said Ethernet information includes p-bits information; and

based upon the determined Ethernet QoS metric, determining a corresponding Frame Relay QoS metric; and

servicing the identified packet for transmission on the Frame Relay network in accordance with the determined corresponding Frame Relay QoS metric protocol to thereby enable similar QoS to be provided to the packet in the Frame Relay network as was provided to the packet in the Ethernet network,

Art Unit: 2454

wherein said servicing the identified packet further includes assigning a drop precedence to the packet based on the p-bits information.

Claim 2. (Canceled)

Claim 3. (**Currently Amended**) The method of claim -2 1, wherein the Ethernet information includes Ethernet port information.

Claim 4. (Previously Presented) The method of claim -2 1, wherein the Ethernet information includes virtual local area network identifier (VLAN ID) information.

Claim 5. (Canceled)

Claim 6. (Previously Presented) The method of claim -2 4, wherein the Ethernet information further includes VLAN ID information.

Claim 7. (Canceled)

Claim 8. (Previously Presented) The method of claim 1, wherein the step of determining a QoS metric includes considering Upper Layer Protocol (ULP) information.

Claim 9. (Previously Presented) The method of claim 8, wherein the ULP information includes Internet Protocol (IP) packet information.

Claim 10. (Previously Presented) The method of claim 9, wherein the IP packet information includes Differentiated Services Code Point (DSCP) bit information.

Claim 11. (Previously Presented) The method of claim 10, wherein the IP packet information further includes VLAN ID information.

Claim 12. (Previously Presented) The method of claim 10, wherein the step of servicing further includes assigning a drop precedence to the packet based on the DSCP bit information.

Claim 13. (**Currently Amended**) A method of implementing Quality of Service (QoS) across Frame Relay and Ethernet networks to enable similar QoS to be provided to packets in both the Frame Relay and Ethernet networks as the packets pass from one network to the other, the method comprising the steps of:

receiving a packet from the Frame Relay network;

identifying the packet according to a Frame Relay protocol for servicing;

determining a Frame Relay QoS metric for the identified packet, the QoS metric being associated with handling of the packet on the Frame Relay network by considering FR information; and

based upon the determined Frame Relay QoS metric, determining a corresponding Ethernet QoS metric; and

servicing the identified packet for transmission in accordance with an Ethernet protocol to thereby enable similar QoS to be provided to the packet in the Ethernet network as was provided to the packet in the Frame Relay network, wherein said servicing the identified packet further includes assigning a drop precedence to the packet based on discard eligible (DE) bit information.

Claim 14. (Previously Presented) The method of claim 13, wherein the Frame Relay information includes data link connection information.

Claim 15. (**Canceled**)

Claim 16. (Previously Presented) The method of claim 1, wherein the step of servicing includes mapping the packet to a Frame Relay Data Link Connections (DLC) and scheduling the packet for transmission according to a sub-connection scheduling scheme.

Claim 17. (Previously Presented) The method of claim 1, wherein the step of servicing includes mapping the packet to one of a plurality of Frame Relay Data Link Connections (DLCs) and scheduling the packet for transmission according to a connection scheduling scheme.

Claim 18. (Previously Presented) The method of claim 13, wherein the step of servicing includes mapping the packet to an Ethernet port and scheduling the packet for transmission according to a class scheduling scheme.

Claim 19. (Previously Presented) The method of claim 13, wherein the step of servicing includes mapping the packet to one of a plurality of Ethernet ports and scheduling the packet for transmission according to a basic scheduling scheme.

Claim 20. (**Currently Amended**) A system for implementing Quality of Service (QoS) across Frame Relay and Ethernet networks to enable similar QoS to be provided to packets in both the Frame Relay and Ethernet networks as the packets pass from one network to the other comprising:

an input; and

control circuitry associated with the input and adapted to:

receive a packet from the Ethernet network;

identify a the packet according to an Ethernet protocol for servicing;

determine an Ethernet QoS metric for the identified packet, the QoS metric being associated with the packet on the Ethernet network, said determining an Ethernet QoS metric includes considering

Ethernet information, wherein said Ethernet information includes p-bits information; and

based upon the determined Ethernet QoS metric, determining a corresponding Frame Relay QoS metric; and

service the identified packet for transmission on the Frame Relay network in accordance with the determined corresponding Frame Relay QoS metric protocol to thereby enable similar QoS to be provided to the packet in the Frame Relay network as was provided to the packet in the Ethernet network,
wherein said servicing the identified packet further includes assigning a drop precedence to the packet based on the p-bits information.

Claim 21. (Canceled)

Claim 22. (Currently Amended) The system of claim ~~22~~ 20, wherein the Ethernet information further includes Ethernet port number information.

Claim 23. (Previously Presented) The system of claim 22, wherein the Ethernet information further includes VLAN ID information.

Claim 24. (Canceled)

Claim 25. (Canceled)

Claim 26. (Canceled)

Claim 27. (Currently Amended) The system of claim ~~24~~ 20, wherein the control circuitry is further adapted to consider Upper Layer Protocol (ULP) information to determine a QoS metric.

Claim 28. (Currently Amended) The system of claim ~~28~~ 27, wherein the ULP information includes Internet Protocol (IP) information.

Claim 29. (**Currently Amended**) The system of claim ~~29~~ 28, wherein the IP information includes Diff-Serv Differentiated Services Code Point (DSCP) bit information.

Claim 30. (Previously Presented) The system of claim 29, wherein IP information further includes virtual local network identifier (VLAN ID) information.

Claim 31. (Previously Presented) The system of claim 30, wherein the control circuitry is further adapted to assign a drop precedence to the packet based on the DSCP bit information.

Claim 32. (**Currently Amended**) A system of implementing Quality of Service (QoS) across Frame Relay and Ethernet networks to enable similar QoS to be provided to packets in both the Frame Relay and Ethernet networks as the packets pass from one network to the other comprising: an input; and control circuitry associated with the input and adapted to:

receiving a packet from the Frame Relay network;
identify the packet according to a Frame Relay protocol for servicing;
consider Frame Relay information to determine a Frame Relay QoS metric for the identified packet, the QoS metric being associated with handling of the packet on the Frame Relay network; and
based upon the determined Frame Relay QoS metric, determining a corresponding Ethernet QoS metric; and

service the identified packet for transmission in accordance with an Ethernet protocol to thereby enable similar QoS to be provided to the packet in the Ethernet network as was provided to the packet in the Frame Relay network, wherein said servicing the identified packet further includes assigning a drop precedence to the packet based on discard eligible (DE) bit information.

Claim 33. (**Currently Amended**) The system of claim ~~33~~ 32, wherein Frame Relay information includes data link connection information.

Claim 34. (**Canceled**)

Claim 35. (**Currently Amended**) The system of claim ~~21–20~~, wherein the control circuitry is further adapted to map the packet to a Frame Relay Data Link Connections (DLC) and schedule the packet for transmission according to a sub-connection scheduling scheme to service the packet.

Claim 36. (**Currently Amended**) The system of claim ~~21–20~~, wherein the control circuitry is further adapted to map the packet to one of a plurality of Frame Relay Data Link Connections (DLCs) and schedule the packet for transmission according to a connection scheduling scheme to service the packet.

Claim 37. (Previously Presented) The system of claim 32, wherein the control circuitry is further adapted to map the packet to an Ethernet port and schedule the packet for transmission according to a class scheduling scheme to service the packet.

Claim 38. (Previously Presented) The system of claim 32, wherein the control circuitry is further adapted to map the packet to one of a plurality of Ethernet ports and schedule the packet for transmission according to a basic scheduling scheme to service the packet.

Claim 39. (**Currently Amended**) The system of claim ~~21–20~~, wherein the system is located at an edge of a core network.

Claim 40. (**Currently Amended**) The system of claim ~~21–20~~, wherein the system is located in a user element.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Wasel whose telephone number is (571) 272-2669. The examiner can normally be reached on Mon-Fri (8:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mohamed Wasel/
Patent Examiner, Art Unit 2454
May 6, 2009

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2454